

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (original) An automated kitchenware washing tank comprising:
a tank with a wall that defines an enclosure for holding a fluid for washing kitchenware;
outlets in the wall for directing fluid into the tank;
an intake opening in the tank;
a pump system comprising a pump and fluid conduit system coupling the pump between the intake opening and the outlets, whereby the pump is adapted to pump fluid from within the tank through the intake opening into the pump system and through the outlets into the tank at a flow rate; and
a control system comprising a controller coupled to the pump system for causing the pump to pump fluid at least two different flow rates through the outlets, and controls to select between the at least two different flow rates.
2. (original) The automated kitchenware washing tank of Claim 1 wherein the control system further comprises a controller programmed with at least one preset program and wherein the control system allows the preset program to be selected and operated, the program controlling the controller to operate the pump through at least two timed cycles, with different flow rates.
3. (original) The automated kitchenware washing tank of Claim 2 further comprising a cleaner dispenser for dispensing cleaner into the fluid in the tank to facilitate cleaning the kitchenware and wherein the control system is interfaced to the cleaner dispenser for automatically causing the cleaner dispenser to dispense cleaner into the fluid.

4. (original) The automated kitchenware washing tank of Claim 2 further comprising a heater for heating the fluid within the tank and wherein the controller is interfaced to the heater to cause the heater to vary the temperature of the fluid within the tank between the cycles.

5. (original) The automated kitchenware washing tank of Claim 1 wherein the wall of the tank includes a bottom wall and an enclosure wall that extends upwardly from the bottom wall, the enclosure wall having at least one angled portion facing at least partially downwardly, and at least some of the outlets being located on the angled portion.

6. (original) The automated kitchenware washing tank of Claim 1 wherein the enclosure wall of the tank has at least two angled portions facing generally downwardly, wherein the outlets are discharge openings and at least some of the discharge openings are formed in each of the angled portions of the wall to direct the fluid generally downwardly into the tank.

7. (original) The automated kitchenware washing tank of Claim 6 wherein the at least two angled portions comprise two angled portions formed on opposed portions of the enclosure wall.

8. (original) The automated kitchenware washing tank of Claim 7 wherein all of the discharge openings are formed in the angled portions of the enclosure wall.

9. (original) The automated kitchenware washing tank of Claim 7 wherein each angled portion of the wall has at least two rows of discharge openings and at least two discharge openings per row.

10. (original) The automated kitchenware washing tank of Claim 9 wherein the angled portions are at about 75 degrees from horizontal, wherein the discharge openings direct fluid into the tank in a crossing pattern.

11. (original) The automated kitchenware washing tank of Claim 10 wherein each angled portion of the enclosure wall has at least three rows of discharge openings and at least three discharge openings per row.

12. (original) The automated kitchenware washing tank of Claim 7 further comprising an overflow formed on the enclosure wall by an elongated cutaway portion in the upper portion of the enclosure wall.

13. (original) The automated kitchenware washing tank of Claim 8 further comprising a drain having a drain opening in one of the walls with a drain pipe connected to the drain opening to allow the tank to be emptied and a valve coupled to the drain and being operable to open and close the drain, thus allowing the tank to be emptied and filled.

14. (currently amended) The automated kitchenware washing tank of Claim 7 further comprising a heater to heat the fluid in the tank, a heat sensor to detect the temperature of the fluid in the tank, and a fluid level sensor to detect whether the fluid is above or below a desired level in the tank.

15. (original) The automated kitchenware washing tank of Claim 14 wherein one of the fluid conduits comprises a plenum that is coupled to the intake opening to form a sump and the heater is disposed in the sump, and wherein the tank further comprises a perforated closure that is hingedly attached to the tank to restrict food debris and dishware from entering the intake opening.

15-31. (previously cancelled)

32-34. (currently cancelled)

35-39. (previously cancelled)

40-46. (currently cancelled)

47. (new) The automated kitchenware washing tank of Claim 4 wherein the controller is programmed with at least one preset program configured to control the controller to cause the heater to heat the fluid within the tank to a temperature equal to or greater than about 150°F.

48. (new) The automated kitchenware washing tank of Claim 47, further comprising an alarm configured to provide a notification when the fluid temperature within the tank is greater than a predetermined safe fluid temperature.

49. (new) The automated kitchenware washing tank of Claim 1 wherein said first flow rate is greater than said second flow rate and wherein said pump system pumps fluid at said first flow rate for washing said kitchenware and said pump system pumps fluid at said second flow rate for preventing grease from settling onto said kitchenware during an idle mode of operation.

50. (new) An automated kitchenware washing tank comprising:
a tank with a wall that defines an enclosure for holding a fluid for washing kitchenware;
outlets in the wall for directing fluid into the tank;
an intake opening in the tank;
a pump system comprising a pump and fluid conduit system coupling the pump between the intake opening and the outlets, whereby the pump is adapted to pump fluid from within the tank through the intake opening into the pump system and through the outlets into the tank at a flow rate;

a control system comprising a controller coupled to the pump system for causing the pump to pump fluid at least at a first flow rate and at a second flow rate, wherein said first flow rate is greater than said second flow rate and wherein said pump system pumps fluid at said first flow rate for washing said kitchenware and said pump system pumps fluid at said second flow rate for preventing grease from settling onto said kitchenware.

51. (new) The automated kitchenware washing tank of Claim 50 wherein said pump system includes a motor controlled by said controller, said motor operating at about 30 hertz when said pump system pumps fluid at said second flow rate.

52. (new) The automated kitchenware washing tank of Claim 50 wherein the control system includes an idle mode, said controller operating said pump system at said second flow rate during said idle mode.

53. (new) An automated kitchenware washing tank comprising:
a tank with a wall that defines an enclosure for holding a fluid for washing kitchenware;
outlets in the wall for directing fluid into the tank;
an intake opening in the tank;
a pump system comprising a pump and fluid conduit system coupling the pump between the intake opening and the outlets;
a heater to heat the fluid in the tank;
a temperature sensor to detect the temperature of the fluid in the tank;
a control system including a controller coupled to the pump system for causing the pump to pump fluid at least two different flow rates through the outlets, said controller programmed with at least two preset programs, wherein at least one of the preset program controls the heater to heat the fluid in the tank to a temperature equal to or greater than about 150°F.

54. (new) The automated kitchenware washing tank of Claim 53, further comprising a cover for the tank enclosure, said cover configured to substantially enclose the tank enclosure when the controller is operating under the control of the preset program for heating the fluid to a temperature of equal to or greater than 150°F.

55. (new) The automated kitchenware washing tank of Claim 53, further comprising an alarm, said alarm configured to provide a notification when the temperature sensor senses a fluid temperature greater than a predetermined safe fluid temperature.

56. (new) The automated kitchenware washing tank of Claim 53 wherein the at least one preset program is a program configured to control the heater during an overnight period.